

Claims

19. (Currently amended) A method of conveying influent to a head cell having multiple trays aligned in a vertical direction, the method comprising:

providing an influent source at a first level above the head cell;

channeling influent from the influent source ~~into the duct~~ in a duct to the head cell at a second level lower than the first level;

changing a velocity of the influent in the duct by channeling the influent through a portion of the duct having a changing cross-sectional area; and

at the head cell, separating the influent from the duct into multiple flows and conveying the multiple flows to the respective multiple trays.

20. (Original) The method of claim 19, wherein the act of changing a velocity includes increasing the velocity of the influent to a predetermined velocity.

21. (Currently amended) The method of claim 20, wherein after the influent reaches the predetermined velocity, the influent is maintained at substantially the predetermined velocity ~~over its downstream course~~.

22. (Original) The method of claim 20, wherein after the influent reaches the predetermined velocity, its velocity remains substantially constant.

23. (Original) The method of claim 20, wherein upon reaching the predetermined velocity, the influent is guided by the duct through a drop in level, and wherein the influent velocity remains substantially constant.

24. (Original) The method of claim 19, further comprising conveying the influent through a drop in level with a portion of the duct that slopes downwardly.

25. (Original) The method of claim 19, wherein the influent flows from the influent source and through the duct without substantial head loss.

26. (Currently amended) A method of conveying influent to a treatment apparatus, comprising:

providing an influent source at a first level above the treatment apparatus;
conveying the influent with a duct along a flow path from the influent source to the treatment apparatus at a second level lower than the first level; and
~~along the flow path, at the treatment apparatus,~~ distributing the influent into multiple independent flows at different levels below the ~~source~~ first level while maintaining a velocity of the influent substantially at a predetermined value.

34. (Currently amended) A method of conveying influent to a head cell with an entry duct, the method comprising:

providing a first section of the duct adapted to receive an entering open channel flow of influent at a first elevation;

providing a second section of the duct positioned downstream of and sloping downwardly from the first section, the second section having a second section cross sectional area in a plane normal to a direction of flow in the second section that remains substantially constant over a length of the second section; ~~and~~

providing a third section positioned downstream of the second section and terminating in multiple nozzles, the nozzles having a closed cross-section and being arranged at different elevations lower than the first elevation, the nozzles having a total cross sectional area substantially equal to the second section cross sectional area; and

distributing a flow received from the first and second sections through the multiple nozzles of the third section as full-pipe flow.

35. (Original) The method of claim 34, wherein the flow through the duct occurs at a predetermined design velocity.

36. (Original) The method of claim 24, wherein the flow through the duct occurs at a predetermined design velocity of about five feet per second.